

APR 7 2006

510(k) Summary  
Vectra™ Laser System and Accessories

K060114

Submitter's Name: Xintec Corporation, dba,  
Convergent Laser Technologies,  
1660 S. Loop Road  
Alameda, CA 94502

Phone Number: 510-832-2130

Fax Number: 510-832-1600

Contact Person: Marilyn M. Chou, Ph.D.

Date Prepared: February 23, 2006

Name of Device: Vectra™ Laser System and Accessories

Sponsor: Xintec Corporation, dba,  
Convergent Laser Technologies,  
1660 S. Loop Road  
Alameda, CA 94502

Classification: Diode laser

Predicate Device: Ceralas Diode 980 nm Laser System (Model 100)

Intended Use/Indications for Use:

The device is intended for delivery of laser light to soft tissue in the contact and non-contact mode during surgical procedures including via endoscope. The device is generally indicated for use in incision, excision, vaporization, ablation, hemostasis or coagulation of soft tissue in ear, nose, and throat and oral surgery (otolaryngology), arthroscopy, gastroenterology, neurosurgery (peripheral nervous system), pulmonary and cardiothoracic surgery, dental applications, and endovenous occlusion of the greater saphenous vein.

The device is specifically indicated for use as follows:

**Ear, Nose and Throat and Oral Surgery (Otolaryngology)**

Hemostasis, incision, excision, ablation, coagulation and vaporization of tissue from the ear, nose, throat and adjacent areas including soft tissue in the oral cavity. Examples include:

Removal of benign lesions from the ear, nose and throat

Excision and vaporization of vocal cord nodules and polyps

- Incision and excision of carcinoma in situ
- Ablation and vaporization of hyperkeratosis
- Excision of carcinoma of the larynx
- Laryngeal papillomectomy
- Excision and vaporization of herpes simplex I and II
- Neck dissection

### **Arthroscopy**

Hemostasis, incision, excision, coagulation, vaporization and ablation of joint tissues during arthroscopic surgery. Examples include:

- Meniscectomy
- Synovectomy
- Chondromalacia

### **Gastroenterology**

Hemostasis, incision, excision, ablation, coagulation and vaporization of tissue in the upper and lower gastrointestinal tracts and also with endoscopic procedures. Examples include:

- Hemostasis of upper and lower GI bleeding
- Excision and vaporization of colorectal carcinoma
- Excision of polyps

### **General Surgery, Dermatology, Plastic Surgery and Podiatry**

Excision, ablation, vaporization and photocoagulation of skin lesions, hemostasis, incision, excision, vaporization, ablation and debulking of soft tissue, abdominal, rectal, skin, fat or muscle tissue and dermabrasion. Examples include:

- Matrixectomy
- Excision of neuromas
- Excision of periungual and subungual warts
- Excision of plantar warts
- Excision of keloids
- Liver resection
- Excision of cutaneous lesions
- Hemorrhoidectomy
- Appendectomy
- Debridement of decubitus ulcers
- Hepatobiliary tumors
- Mastectomy
- Dermabrasion
- Vaporization and hemostasis of capillary hemangioma
- Excision, vaporization and hemostasis of abdominal tumors
- Excision, vaporization and hemostasis of rectal pathology
- Pilonidal cystectomy
- Herniorraphy
- Adhesiolysis

- Parathyroidectomy
- Laparoscopic cholecystectomy
- Thyroidectomy
- Resection of organs
- Debridement of wounds
- Photocoagulation of teleangiectasia of the legs and face
- Photocoagulation of vascular lesions of the face and extremities
- Endovascular coagulation of the greater saphenous vein of the thigh in patients with superficial vein reflux
- Treatment of reticular veins and branch varicosities

### **Urology**

Excision, vaporization, incision, coagulation, ablation and homeostasis of urological, including BPH/prostatic, tissues. Examples include:

- Vaporization of urethral tumors
- Release of urethral stricture
- Removal of bladder neck obstruction
- Excision and vaporization of condyloma
- Lesions of external genitalia

### **Gynecology**

Ablation, excision, incision, coagulation, hemostasis and vaporization of gynecological tissue. Examples include:

- Endometrial ablation
- Excision or vaporization of condylomata acuminata
- Vaporization of cervical intraepithelial neoplasia
- Cervical conization
- Menorrhagia

### **Neurosurgery**

Vaporization, coagulation, excision, incision, ablation and hemostasis of soft tissue. Examples include:

- Hemeostasis in conjunction with meningiomas

### **Cardiac Surgery**

Hemostasis and coagulation of soft tissue, including cardiac tissue

### **Pulmonary Surgery**

Hemostasis, vaporization, coagulation, incision, excision and ablation of soft tissue in the pulmonary system. Examples include:

- Tracheobronchial malignancy or stricture
- Benign and malignant pulmonary obstruction
- Endoscopic pulmonary applications

## **Dental Applications**

Indicated for the following applications on intraoral and extraoral soft tissue (including marginal and interdental gingival and epithelial lining of free gingival): frenectomy, frenotomy, biopsy, operculectomy, implant recovery, gingivectomy, gingivoplasty, gingival troughing, crown lengthening, hemostasis of donor site, removal of granulation tissue, laser assisted flap surgery, debridement of diseased epithelial lining, incisions and draining of abscesses, tissue retraction for impressions, papillectomy, vestibuloplasty, excision of lesions, exposure of unerupted/partially erupted teeth, leukoplakia, removal of hyperplastic tissues, treatment of aphthous ulcers and sulcular debridement (removal of diseased or inflamed soft tissue in the periodontal pocket), pulpotomy, pulpotomy as an adjunct to root canal therapy and light activation of bleaching materials for teeth whitening.

## **Endovenous Occlusion of the Greater Saphenous Vein in Patients with Superficial Vein Reflux**

Indicated for use in the endovascular coagulation of the Greater Saphenous Vein (GSV) of the thigh in patients with Superficial Vein Reflux.

## **Technical Characteristics**

The Vectra™ Laser System and Accessories is substantially equivalent to the Optica and Odyssey Laser Systems (Xintec Corporation, dba, Convergent Laser Technologies, Alameda, CA) and Ceralas D 980 Diode Laser Systems (East Longmeadow, MA) previously cleared for marketing under applicable 510(k) pre-market notification regulations.

Table I summarizes device specifications of the Vectra Laser Systems compared to the Xintec Corporation Optica and Odyssey Laser Systems (Xintec Corporation, dba, Convergent Laser Technologies, Alameda, CA) and Ceralas D 980 Diode Laser System (East Longmeadow, MA) which have been previously cleared for marketing under applicable 510(k) pre-market notification regulations.

Table I: DEVICE DESCRIPTION AND EQUIVALENCE INFORMATION

## ***Specifications***

	Vectra™	Optica™ 510K# K901710	Odyssey™ 510K# 951910	Ceralas 510L#K050824
Wavelength	980nm $\pm$ 10%	1064nm $\pm$ 10%	2100nm $\pm$ 10%	980nm
Maximum Output Power	10/20/30W; 60W; 80W; 100W; 120W	60W; 80W; 100W; 120W	15W; 30W; 45W; 60W; 80W	15W; 25W; 50W; 100W

Operating Modes	Continuous or pulsed	Quasi-Pulsed	Pulse	Continuous or pulsed
Aiming Beam	Green	Red	Green	Red
Laser Activation	Footswitch	Footswitch	Footswitch	Footswitch
Cooling	Air-cooled	Air-cooled	Air-cooled	Air-cooled
Weight	~200 lbs	250 lbs	175 lbs	50 lbs
Power Requirement	110/220VAC	110/220VAC	110/220VAC	110/220VAC

Note: These prototype specifications are subject to modifications for the final production models.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

FEB 21 2008

Xintec Corporation, dba  
c/o Marilyn M. Chou, Ph.D.  
Convergent Laser Technologies  
1660 South Loop Road  
Alameda, CA 94502

Re: K060114

Trade/Device Name: Vectra™ Laser System

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser surgical instrument for use in general and plastic surgery  
and in dermatology

Regulatory Class: II (two)

Product Code: OCL, GEX

Dated: February 23, 2006

Received: February 24, 2006

Dear Dr. Chou:

This letter corrects our substantially equivalent letter of April 7, 2006.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

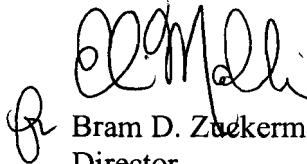
Page 2 - Marilyn M. Chou, Ph.D.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to continue marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

# Indications for Use

510(k) Number (if known): **K#060114**

Device Name: **Vectra™ Laser System**

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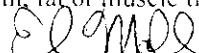
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**(Division Sign-Off)**

**Division of General, Restorative,  
and Neurological Devices**

**510(k) Number** K060114

Excision of periungual and subungual warts  
Excision of plantar warts  
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Excision of cutaneous lesions  
Hemorrhoidectomy  
Appendectomy  
Debridement of decubitus ulcers  
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Mastectomy  
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**(Division Sign-Off)**  
**Division of General, Restorative,  
and Neurological Devices<sup>2</sup>**

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Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use                     
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)

**Division of General, Restorative,  
and Neurological Devices**

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**510(k) Number** K060114